FISH AND WILDLIFE HABITAT AND HARVEST AREAS

Goals

Maintain Publicly Owned Habitat Base. Maintain in state ownership sufficient suitable lands and waters to provide for the habitat needs of important fish and wildlife resources.

Ensure Access to Public Lands and Waters. Ensure access to public lands and waters to promote or enhance the responsible public use and enjoyment of fish and wildlife resources.

Mitigate Habitat Loss. When resource development projects occur, avoid or minimize reduction in the quality and quantity of fish and wildlife habitat.

Contribute to Economic Diversity. Contribute to Alaska's economy by protecting the fish and wildlife resources which contribute directly or indirectly to local, regional, and state economies through commercial, subsistence, sport, and nonconsumptive uses.

Management Guidelines

A. Mitigation. When issuing permits and leases or otherwise authorizing the use or development of state lands, the Departments of Natural Resources and Fish and Game will recognize the requirements of the activity or development and the benefits it may have to habitat when determining stipulations or measures needed to protect fish and wildlife or their habitats. The costs of mitigation relative to the benefits to be gained will be considered in the implementation of this policy.

All land use activities should be conducted with appropriate planning and implementation to avoid or minimize adverse effects on fish and wildlife or their habitats.

The departments will enforce stipulations and measures, and will require the responsible party to remedy any significant damage to fish and wildlife or their habitats that may occur as a direct result of the party's failure to comply with applicable law, regulations, or the conditions of the permit or lease.

When determining appropriate stipulations and measures, the departments will consider, in order of priority, the following steps. Mitigation requirements listed in other guidelines in this plan will also follow these steps.

- 1. Avoid anticipated, significant adverse effects on fish and wildlife or their habitats through timing or other management options.
- 2. When significant adverse effects cannot be avoided by design, siting, timing, or other management options, the adverse effect of the use or development will be minimized.
- 3. If significant loss of fish and wildlife habitat occurs, the loss will be rectified, to the extent feasible and prudent, by repairing, rehabilitating, or restoring the affected area to a useful state.
- 4. DNR will consider requiring replacement or enhancement of fish and wildlife habitat when steps 1 through 3 cannot avoid substantial and irreversible loss of habitat. ADF&G will clearly identify the species affected, the need for replacement or enhancement, and the suggested method for addressing the impact. Replacement with or enhancement of similar habitats of the affected species in the same region is preferable. DNR will consider only those replacement and enhancement techniques that have either been proven to be, or are likely to be effective and that will result in a benefit to the species impacted by the development. Replacement or enhancement will only be required by DNR if it is determined to be in the best interest of the state

either through the AS 38.05.035(e) or permit review process. Replacement may include structural solutions such as creating spawning or rearing ponds for salmon, creating wetlands for waterfowl; or non-structural measures such as research or management of the species affected, legislative or administrative allocation of lands to a long-term level of habitat protection that is sufficiently greater than that which they would have otherwise received, or fire management to increase habitat productivity.

- B. Allowing Uses in Mapped Crucial Fish and Wildlife Habitats. The crucial areas shown in the plan were defined using the best information available at the time the plan was written. When better information becomes available through addition studies, site inspections or other means, that information should be used to correct the habitat information in the plan.
- 1. Allowing Uses Not Designated in Chapter 3 as Primary or Secondary Uses. Uses that are not designated as primary or secondary uses and that cause an adverse impact to a mapped crucial habitat as described in part 3 below, are incompatible with the primary uses and values in areas rated as crucial habitat for fish and wildlife. These uses are initially assumed to be a nonconforming use under section 6 AAC 80.130(d) of the ACMP Habitat standards. (Appendix C contains ACMP habitat standards and regulations for non-conforming uses.)

Uses not designated that cause an adverse impact to a crucial habitat type as described in part 3, below, may be allowed if ADF&G determines that the area does not contain the habitat type in question, if ADF&G determines through new information or more detailed analysis that the area is not crucial as defined in the plan, or if the use receives a positive conclusive consistency determination under the ACMP.

2. Allowing Uses Designated in Chapter 3 as Primary or Secondary Uses. If, within mapped crucial habitats, a use other than fish

and wildlife habitat and harvest is given a primary or secondary designation or the area is left open to mineral entry, the department policy is: (a) that with appropriate design, siting, and operating stipulations, the designated use can be made compatible and significant impacts to the habitat avoided, or (b) that the use is of sufficient importance or lacks a feasible alternative that it should be allowed within the habitat consistent with the state's mitigation and ACMP policies.

Mining in Crucial Habitats. Before DNR will approve permits or plans of operation for mining in mapped crucial fish and wildlife habitat, the miner must provide information adequate for the agencies to determine that activities will not have a significant detrimental effect on the fish and wildlife resources of the area or the long-term productivity of the habitat, or that a reasonable expectation of the mineral values outweighs the long-term value of the crucial fish and wildlife habitats that are put in jeopardy. Activities may be restricted or prohibited when the species depending on the crucial habitat is present. (For performance bonds in crucial fish and wildlife areas, see guideline E, Bonding, page 2-50.)

- 3. Impacts of Concern to Crucial Habitat from Designated and Non-Designated Uses.
- a. In estuaries; lagoons; eelgrass beds; kelp beds; salmon-spawning, -schooling, or -rearing areas; or tidal areas within 300 feet of an anadromous fish stream. In these areas the impacts of concern are those that will block fish passage or that entail dredging; filling; significant compaction of the vegetation and sediment; blasting; alteration of flow patterns; or other impacts that would significantly reduce the productivity and value of the habitat.
- b. Near bird rookeries, and marine mammal rookeries and haulouts. In these areas the impacts of concern are those that will cause sig-

nificant impacts to bird rookeries, marine mammal rookeries, seal lion haulout areas, or haulout areas used by 25 or more seals, or that will create repeated disturbance to the animals from noise or human use.

Some uses may be compatible if restricted to seasons when the birds/mammals are absent, or if operating stipulations, vegetative or topographic buffers, or other techniques can be used to minimize the impact, or if the disturbance is not substantial enough to disrupt the species.

c. In waterfowl nesting, staging, and molting habitat. In these areas, the impacts of concern are those that will produce repeated high levels of acoustical or visual disturbance during sensitive periods including boat traffic, blasting, or dredging, ATV's or aircraft, or will alter significant areas of intertidal vegetation or nesting habitat.

A determination of whether a use can be made compatible to this guideline will be made at the time the use is proposed. The following listing shows the periods when important species are most sensitive to disturbance and serves as a general indication of periods when uses are likely to be restricted.

Species

Seabirds
Ducks & geese nesting and molting
Swans:

Nesting, brooding-rearing molting
Spring, fall, and winter
concentration
Seal haulout
Sea lion haulout or rookery
Winter use
Year-round use
Sea otter haulout and pupping¹
Mountain goat winter habitat¹

Approximate Sensitive Period

March 15 through September 1 April 15 through August 15

April 15 through september 15

September 15 through April 15 June 1 through July 31

September 1 through March 31 Year-round Year-round November 1 through May 31

¹ Crucial mountain goat winter habitat occurs on state land only in the Blying Sound and Valdez management units (units 15 and 21). Crucial sea otter haulouts and pupping areas occur in four locations in Hawkins Cut-off (units 25 and 26). The guidelines for these species are given in those units.

- C. Allowing Uses Outside of Mapped Crucial Fish and Wildlife Habitat Areas. Outside of mapped crucial fish and wildlife habitat, habitat-altering uses will be sited consistent with 6 AAC 80.130 (a-d) of the ACMP Habitat Standards, the management guidelines in this chapter, and the management intent and guidelines in Chapter 3.
- D. Conflicts with Hatchery Harvest Areas. The two guidelines below apply to terminal and special hatchery harvest areas referenced in Chapter 3. The areas are adjacent to the Sound's five existing salmon hatcheries. In these locations returning hatchery stock is naturally separated from wild stock, and, at certain seasons, these areas receive concentrated commercial fishing harvest. They also support dense concentrations of rearing juvenile salmon when the hatchery releases smolts in the spring. (See definition of hatchery harvest area in the glossary, Appendix A.)
- 1. Disease, Pollution, and Productivity. Due to the concentration of hatchery stock, the following uses will not be allowed if there is a feasible and prudent alternative: uses with the potential to transmit disease to the concentrated hatchery stock; uses that significantly reduce the productivity of the salmon hatchery by competing with the available food supply or by other means; and uses that could cause significant water pollution.
- 2. Interfering with the Commercial Fishery. Because hatchery harvest areas, particularly the nearshore areas, receive dense concentrations of gill net and purse seine commercial fishing activity, any tideland facility (rafts, floats, mooring systems, etc.) that would obstruct the commercial fishing use of the area should not be located in these areas if there is a feasible and prudent alternative.
- **E.** Hatchery Source Waters. To preserve the quality of a hatchery's water supply, uses will not be located on state land where they would risk reducing water quality below that needed by the hatchery.

- F. Activities Adjacent to Purse Seine Hookoff Points. Activities adjacent to a traditional purse seine hookoff point should not foreclose access to that point during fishing season.
- G. Activities in Concentrated-Use Purse Seine and Gill Net Areas. If there are feasible and prudent alternatives, tideland facilities will not be located where they would obstruct drift net and purse seine use of the shoreline in concentrated use purse seine and gill net areas mapped in Chapter 3.
- H. Activities in Traditional-Use Commercial Herring Areas. Activities within traditional herring fishery areas including sac roe, herring pounding, and wild kelp harvest fishery areas should be conditioned to minimize disruption of the harvest. In traditional herring pound areas, authorizations will ensure that appropriate protected anchorages remain for use by the fishery.
- I. Anchorages. See Guideline D, Anchorages, Regionally, Important Campsites, and Frequently Used Recreation Areas, page 2-25.
- J. Habitat Manipulation. Habitat manipulation through water control, timber management practices, or other measures may be used to improve habitat for certain fish and wildlife species where ADF&G determines that it is beneficial to the species or habitat, and DNR determines that it is compatible with other primary uses.
- K. Water Intake Structures. When issuing appropriations for waters providing fish habitat, DNR will require that practical water intake structures be installed that do not result in entrapment or impingement of fish. The simplest and most cost-effective technology may be used to implement this guideline.

Water intake structures will be screened, and intake velocities will be limited to prevent entrapment, entrainment, or injury to fish. The structures supporting intakes should be designed to prevent fish from being led into

the intake. Other effective techniques may also be used to achieve the intent of this guideline. Screen size, water velocity, and intake design will be determined in consultation with ADF&G.

L. Threatened and Endangered Species. All land use activities shall be conducted consistent with state and federal Endangered Species Acts to avoid jeopardizing the continued existence of threatened or endangered species of fish or wildlife or their continued use of an area and to avoid modification or . destruction of their habitat. Specific mitigation recommendations should be identified through interagency consultation for any land use activity that potentially affects threatened or endangered species. In Alaska, eight species are listed under the jurisdiction of the U.S. Fish and Wildlife Service and Alaska Department of Fish and Game as threatened (T) or endangered (E) in accordance with the state and federal Endangered Species Acts, as amended:

Species	Status
Arctic peregrine falcon	
(Falco peregrinus tundrius)	T
American peregrine falcon	
(Falco peregrinus anatum)	E
Aleutian Canada goose	
(Branta canadensis leucopareia)	E
Eskimo curlew	
(Numenius borealis)	E
Short-tailed albatross	
(Diomedea alabatrus)	E
Humpback whale	
(Meg aptra novae ang liae)	E
Fin whale	
(Balaenoptera physalus)	E
Gray whale	
(Es chrichtius robus tus)	E

The Fish and Wildlife Enhancement Office of the U.S. Fish and Wildlife Service should be consulted on questions that involve endangered species.

M. Eagles. Activities that potentially affect bald and golden eagles will be consistent with

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the state and federal Endangered Species Acts and the Bald Eagle Protection Act of 1940 as amended. The following DNR standards are drawn from a cooperative agreement signed by the U.S. Forest Service and the U.S. Fish and Wildlife Service (USFWS). The USFWS may not determine them to be adequate in all circumstances. Also, meeting the guidelines does not absolve the party from the penalty provisions of the Bald Eagle Protection Act, therefore, the USFWS should be consulted when activities may affect bald or golden eagles.

- 1. Siting Facilities to Avoid Eagle Nests. Facilities determined by the U.S. Fish and Wildlife Service to cause significant disturbance to nesting eagles will not be allowed within 330 feet of any bald eagle nest site, whether the nest is currently active or not.
- 2. Activities Disturbing Nesting Eagles. Activities the U.S. Fish and Wildlife Service determines are likely to cause significant disturbance to nesting eagles will be prohibited within 330 feet of active bald eagle nests between March 1 and August 31. Temporary activities and facilities that do not alter eagle nesting habitat or disturb nesting eagles, as determined by the USFWS, may be allowed at other times.

Permits for blasts of a magnitude documented to be disruptive to nesting eagles will, to the extent feasible and prudent, be prohibited within one-half mile of active eagle nests between March 15 and August 31.

- N. Prime Habitat for Sea Otters. To the extent feasible and prudent, permitted activities in mapped prime sea otter habitats will be conditioned to avoid or otherwise mitigate adverse affects on kelp beds, pupping concentration areas, feeding areas, and other habitats important for sea otters.
- O. Alteration of the Riverine Hydrologic System. To the extent feasible, channelization, diversion, or damming that will alter the natural hydrological conditions and have a sig-

nificant adverse impact on important riverine habitat will be avoided.

- P. Cumulative Impacts. ADF&G will periodically assess the cumulative effects of changes in the use and development of Prince William Sound on the game and non-game fish and wildlife species in the area. In doing so, ADF&G may solicit the advice of other appropriate fish and wildlife agencies. In the case of declining health or population of a species, ADF&G should advise DNR of the land and waters critical to the species and recommend permit and lease stipulations necessary for its protection.
- Q. Fish and Wildlife Enhancement on State Lands. Fish and Wildlife enhancement activities on state lands whether by ADF&G or other parties will be consistent with the management intent for those lands. Enhancement activities likely to attract significant public use, including sport fishing use, will be designed and located to minimize the impact of additional public use on the existing recreation resources including anchorages, campsites, and existing and intended wilderness values.
- **R. Soil Erosion.** Soil erosion will be minimized by restricting the removal of vegetation adjacent to water bodies and by stabilizing disturbed soil as soon as possible.
- S. Grounding of Floating Facilities. Floating tideland facilities will not ground at any tide stage unless ADF&G determines there will be no significant impact to the habitat values or DNR determines there is no feasible and prudent alternative.
- T. Other Guidelines Affecting Fish and Wildlife Habitat. Several other guidelines may affect the protection and management of fish and wildlife habitat. See the following sections of this chapter:

Coordination and public notice Forestry Instream flow Materials
Public access
Recreation, tourism, cultural, and scenic resources
Settlement
Subsurface resources
Shoreline development
Transportation and utilities

In addition, Alaska Coastal Management habitat standards 6 AAC 80.130(a-d) provide guidance for uses in coastal habitats. These standards are contained in Appendix C.

Summary of Policies

The most important habitat and public use lands will be retained in public ownership and managed to maintain fish and wildlife production and related public uses. The plan uses management intent statements and guidelines to protect habitat and harvest areas. Land disposal and other intensive uses are sited to avoid the highest value habitat lands.

Management Intent. Fish and wildlife habitat and harvest are identified as a primary use of state tidelands adjacent to the US Forest Service proposed wilderness areas, in important fishing and harvest areas (including the hatchery harvest areas adjacent to the Sound's five salmon hatcheries), and in other sensitive habitats. In areas identified for land offerings, buffers are required along streams and wetlands to protect fish and wildlife resources and public use.

To protect important salmon spawning habitat, certain streams and estuaries will be closed to new mineral entry. In other areas, permit stipulations will be used to protect species and habitat productivity. An explanation of the mineral closures is contained in the Subsurface Resources section of this chapter.

Guidelines. Guideline B lists crucial habitats and indicates the impacts that would damage those habitats. Uses that create those impacts would be considered non-conforming uses under regulations of the Alaska Coastal Management Program (ACMP). Under ACMP regulations, non-conforming uses may be allowed if there is a significant public need for the proposed use or activity; there is no feasible and prudent alternative to meet the public need; and all feasible and prudent steps have been taken to mitigate the impacts.

Crucial habitats are shown on the management unit maps in Chapter 3. Crucial habitat types and the impacts that would create a nonconforming use in those habitats are listed in Table 2-1.

Guidelines are also included to protect the commercial fishery harvest. Guidelines protect the continued use and productivity of the hatchery harvest areas (the areas near hatcheries that receive concentrated harvest of the returning hatchery stock). These guidelines address transmission of disease, pollution, and productivity of the habitat and potential interference with the commercial fishery. Other guidelines address the quality of waters used by hatcheries; activities near purse seine hook-off points, and near concentrated-use purse-seine and gill-net harvest areas; and activities in commercial herring harvest areas. In addition, the background information in each management unit documents existing commercial fishing uses.

Guidelines also address other important habitats and uses such as siting and operation of log transfer facilities; impacts to bald eagles, endangered or threatened species, and sea otter habitat; and mitigation.

Table 2-1. Crucial Habitats and Activities that Create a Non-Conforming Use

Habitat Type

Estuaries; lagoons; eelgrass beds; intertidal salmon spawning or rearing areas; tidal areas within 300 feet of an anadromous fish stream. These habitats are within the estuaries noted on the management unit maps in Chapter 3.

Areas near bird rookeries, and marine mammal rookeries, and haulouts.

Waterfowl Nesting and Molting Habitat.

Activity

Blocking fish passage; dredging; filling; significant compaction of the vegetation or sediment; blasting; alteration of flow patterns; or other activities that would significantly reduce the productivity and value of the habitat.

Significant impact to the habitat or repeated disturbance to the animals from noise or human activity.

High levels of acoustical or visual disturbance from boat traffic, blasting, or dredging during sensitive periods; alteration of significant areas of intertidal vegetation or nesting habitat.